

## **REMARKS**

Applicants will address each of the Examiner's comments and objections in the order in which they appear in the Office Action.

### **Election/Restriction**

In the Office Action, the Examiner has made the restriction requirement Final. Applicants traverse this requirement for the reasons discussed in the previous response.

While Applicants traverse this restriction, in order to advance the prosecution of this application, Applicants confirm their election to prosecute Group II, Claims 79-85, in the above-identified application and are canceling the non-elected claims without disclaimer or prejudice to filing a divisional application on these non-elected claims.

### **Priority**

The Examiner states in the Office Action that Applicants have not filed a certified copy of the Japanese application in which priority is claimed under 35 USC §119. Applicants respectfully disagree.

The present application is a continuation under 35 USC §120 of prior U.S. application serial no. 09/735,096 filed on December 11, 2000. As shown in the attached copy of the transmittal and return post card, from the '096 application, a certified copy of the priority document for Japanese application serial no. 11-356732 filed December 15, 1999 in Japan was filed in the '096 application on December 11, 2000. The receipt of the certified copy was acknowledged by the Examiner in the Office Action of August 30, 2002 in the '096 application (copy attached). Therefore, the certified copy has been properly filed as required under 35 USC §119. Accordingly, it is respectfully

requested that the Examiner acknowledge the filing of this certified copy and withdraw this objection.

#### Specification

The Examiner also objects to the title as not being descriptive and is requiring a new title be submitted. Accordingly, Applicants are amending the title to recite “OLED Display With Auxiliary Electrode.” It is respectfully submitted that this overcomes the Examiner’s objection, and it is requested that the objection be withdrawn.

#### Allowable Subject Matter

Applicants appreciate the Examiner’s allowance of Claims 79-85. As all other claims have been canceled, the application is now in a condition for allowance.

#### Interference Suggestion

On October 28, 2006, Applicants filed an Interference Suggestion with Claims 79-93.<sup>1</sup> These claims were copied from or are substantially similar to claims 1, 2, 5-7, 9, 10, 15, 16, 19-23 and 28 of US 6,812,637. Pending Claims 79-85 in the present application are still either identical or substantially similar to claims 1, 2, 5-7, 9 and 10 of the ‘637 patent.

In the Interference Suggestion, Applicants suggested the declaration of an interference between the present application and issued patent USP 6,812,637 (Cok). Applicants proposed a Count I. Claims 1, 2, 5-7, 9 and 10 of the ‘637 patent correspond to Count I and Claims 79-85 of the present application correspond to Count I.

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<sup>1</sup> Applicants are filing a divisional application for the non-elected claims, including Claims 86-93 from this application. Applicants will file an interference suggestion in the

Proposed Count I is as follows:

**Count I**

A top emitting OLED display, comprising:

- a) a substrate;
- b) a patterned electrode formed above the substrate, defining a plurality of light emitting elements having gaps between the light emitting elements;
- c) a layer of OLED material disposed above the patterned electrode;
- d) a continuous transparent electrode disposed above the layer of OLED material; and
- e) a light-absorbing auxiliary electrode that is thermally and electrically conductive and in electrical and thermal contact with the continuous transparent electrode and located over the gaps between the light emitting elements of the display.

Claim 79 of the present application corresponds exactly to Count I, and therefore, the count would have anticipated the subject matter of this claim, if the count was prior art. Dependent claims 80-85 of the present application also correspond to Count I. Claim 1 of the '637 patent corresponds to Count I, as claim 1 is the same as Count I. Dependent Claims 2, 5-7, 9 and 10 of the '637 patent also correspond to Count I.

Applicants also showed in the Interference Suggestion the following:

- a. Correspondence of the claims to the count;
- b. Why Applicants will prevail on priority over the '637 patent; and
- c. Support for independent Claim 79 in the present application;

Accordingly, Applicants believe that there is interfering subject matter between the present application and the '637 patent and believe an interference should be declared. Applicants should be the senior part in this interference. Therefore, it is respectfully requested that such an interference

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divisional application for Claims 86-93 from this application (renumbered in the divisional

be declared.

Conclusion

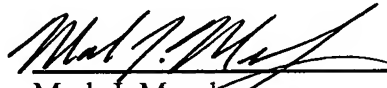
It is respectfully submitted that the present application is in a condition for allowance.

It is respectfully requested that an interference be declared at this time between the present application and the '637 patent.

If any fee should be due for this amendment, please charge our deposit account 50/1039.

Favorable reconsideration is earnestly solicited.

Respectfully submitted,

  
Mark J. Murphy  
Registration No. 34,225

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Customer no. 26568



Attorney Docket No. SEL 230

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
PATENT APPLICATION TRANSMITTAL LETTER

Transmitted herewith for filing is the patent application of:

1. Inventor(s): Takeshi NISHI and Noriko ISHIMARU
2. Title: EL Display Device

Name of applicant(s) and current correspondence address of applicant(s)

Name: Takeshi NISHI  
Citizenship: Japanese  
Residence: Kanagawa, Japan  
Mailing Address: c/o Semiconductor Energy Laboratories,  
Co., Ltd., 398, Hase, Atsugi-shi,  
Kanagawa-ken 243-0036 Japan

Name: Noriko ISHIMARU  
Citizenship: Japanese  
Residence: Kanagawa, Japan  
Mailing Address: c/o Semiconductor Energy Laboratories,  
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Kanagawa-ken 243-0036 Japan

Enclosed are:

<u>  X  </u>	<u>  13  </u>	Sheets of Drawings
	<u>  X  </u>	Formal
	<u>      </u>	Informal
<u>  X  </u>		Assignment of invention to <u>Semiconductor Energy</u> <u>Laboratory Co., Ltd.</u>
<u>  X  </u>	<u>  46  </u>	Pages of Specification
<u>  X  </u>	<u>   6  </u>	Pages of Claims
<u>  X  </u>		Abstract of The Disclosure
<u>      </u>		Statement of Small Entity
<u>  X  </u>		Declaration and Power of Attorney
<u>  X  </u>		Information Disclosure Statement

X   Appointment of Associate Attorneys

Applicants claim priority under 35 USC §119 to the following foreign application:

Serial no. 11-356732 filed December 15, 1999 in Japan.

  X   A certified copy of this priority document is enclosed herewith.

       Please enter the attached amendment before calculating the fees.

Claims as Filed

	Number Filed		Number Extra	Rate	Fee
Total	36	-20	16	(small entity) x 9 (others) x 18	\$288.00
Independent	4	-3	1	(small entity) x 40 (others) x 80	\$80.00
Multiple Dependent	No			(small entity) x 135 (others) x 270	\$0.00
Basic Fee				(small entity) x 355 (others) x 710	\$710.00
Assignment					\$40.00
Total Fee					\$1118.00


       Please charge my Deposit Account No. 50/1039 in the amount of \$ \_\_\_\_\_. A duplicate copy of this sheet is enclosed.

  X   The Commissioner is hereby authorized to charge any additional fees (except the issue fee) which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment to Deposit Account No. 50/1039. A duplicate copy of this sheet is enclosed.

X

A check in the amount of \$1118.00 is enclosed to cover the filing fee and the recordation of the Assignment, if any, transmitted herewith.

Date: December 1, 2000

  
Mark J. Murphy  
Registration No.: 34,225  
COOK, ALEX, MCFARRON, MANZO,  
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"Express Mail" Mailing Label No. EL613563562  
Date of Deposit December 11, 2000

I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to: Commissioner for Patents, Washington, D.C. 20231

Name, Cristine M. Noll  
(typed or printed)

Signature Cristine M. Noll



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/735,096	12/11/2000	Takeshi Nishi	SEL 230	5341

7590 08/30/2002  
COOK, ALEX, McFARRON, MANZO,  
CUMMINGS & MEHLER, LTD.  
SUITE 2850  
200 WEST ADAMS STREET  
CHICAGO, IL 60606

EXAMINER

TRAN, THUY V

ART UNIT PAPER NUMBER

2821

DATE MAILED: 08/30/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

RECEIVED  
SEP 03 2002

COOK, ALEX, McFARRON,  
MANZO, CUMMINGS & MEHLER

SEL

CASE	0553-0230
ATTY.	<i>See log</i>
DUE DATE	DKT. BY <input checked="" type="checkbox"/>
CALL UP	DKT. BY
RE.P. SENT	DKT. BY
REVIEWED BY ATTY.	DTE
OK TO FILE	<i>3mo-Reply due 11/30/02</i>

**Office Action Summary**



Application No.

09/735,096

Examiner

THUY V. TRAN

Applicant(s)

NISHI ET AL.

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12/11/2000 & 01/03/2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2, 3.                      6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Inventorship***

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

### ***Abstract Objection***

3. The abstract of the disclosure is objected to because of the following informalities:

Line 3, change "109" to --(109)--;

Lines 4 and 5, change "108" to --(108)--.

Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2821

A person shall be entitled to a patent unless –

(e) the invention was described in–

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or  
(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

5. Claims 1-7, 9-16, 18-25, 27-34, and 36 are rejected under 35 U.S.C. 102(e) as being anticipated by Hamada (U.S. Patent No. 6,114,715).

As to claims 1, 10, 19, and 28, Hamada discloses, in figure 8, an EL display device comprising (1) an active matrix substrate [102] over which pixels [42] are arranged, and (2) an EL element [109] having a pixel electrode as a cathode [108], an anode [103], and an EL layer [106], wherein (i) the pixel electrode [108] is connected to a thin film transistor [43], and (ii) a metal thin film [2] is provided on/on a portion of the anode or between the anode/a portion of the anode and a counter substrate [104] so as to conceal gaps between the pixels.

As to claims 2, 11, 20, and 29, Hamada inherently teaches that the metal film has a film resistance, which is lower than that of the anode (see col. 5, lines 62-65).

As to claims 3, 12, 21, and 30, Hamada teaches that the metal film functions as a light shielding film (see col. 5, lines 62-65; col. 6, lines 60-61).

As to claims 4, 13, 22, and 31, Hamada teaches that the metal film has a layered structure (see figure 8).

As to claims 5, 14, 23, and 32, Hamada teaches that raised portions [107] are provided on a surface of the cathode of the EL element (see figure 8).

Art Unit: 2821

As to claims 6, 15, 24, and 33, Hamada teaches that an element of the metal film is selected from the group of Ti, Al, Ta, W, Cr, Cu, and Ag (see col. 6, lines 60-61).

As to claims 7, 16, 25, and 34, Hamada teaches that the anode comprises indium tin oxide (see col. 2, lines 6-7).

As to claims 9, 18, 27, and 36, Hamada inherently teaches that the EL display device is one selected from the group consisting of a video camera, a head-mount display, a personal computer, a car navigation system, a mobile telephone, and a car audio equipment (see col. 1, lines 5-8).

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 8, 17, 26, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hamada.

As to claims 8, 17, 26, and 35, Hamada discloses all of the claimed subject matter, as expressly recited in claims 1, 10, 19, and 28, except for the cathode being made of aluminum. However, aluminum has been well-known in the art as a good electrical-conductive material. Therefore, to make the cathode of Hamada in aluminum for a good electrical-conduction would have been deemed obvious to a person skilled in the art.

***Citation of relevant prior art***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Prior art Yamada et al. (U.S. Patent No. 6,072,450) discloses a display apparatus.

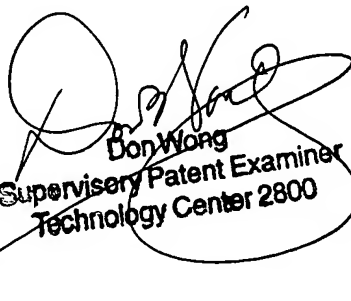
***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THUY V. TRAN whose telephone number is (703) 305-0012. The examiner can normally be reached on M-F (8:30-6:00) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, DON K. WONG can be reached on (703) 308-4856. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-3807 for regular communications and (703) 746-3807 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Thuy Vinh Tran  
August 25, 2002

  
Don Wong  
Supervisory Patent Examiner  
Technology Center 2800



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REMARKS

THE U.S. PATENT & TRADEMARK OFFICE  
OFFICIAL MAILROOM STAMP AFFIXED  
HERETO, ACKNOWLEDGES RECEIPT OF:

ENCLOSURES:

- (X) Application Patent  
(X) Specification 46 pages  
(X) Claims 6 pages  
(X) Abstract 1 page(s)  
(X) Drawing Sheets no. 13 (F) X (INF)  
(X) Transmittal Letter: New Patent Application  
(X) Check \$ 1118.00 No: 3994  
(X) Declaration/Oath  
(X) Assignment and Cover Sheet  
(X) Information Disclosure Statement & References  
( ) Response/Amendment  
( ) Extension of Time (In Duplicate)  
( ) Small Entity Status  
(X) Copy of Priority Document : Japan#11-356732  
(X) Appointment of Associate Attorneys  
( )

U.S. PTO  
09/735096  
12/11/00

RE: APPLICATION ATTY/SEC: MJM/cn  
File no: SEL 230

Applicant: Takeshi NISHI et al

S.N.: Not Assigned Filing Date: Herewith

Title: EL Display Device

Due date: 12/15/2000 Date Sent: 12/11/2000

SEL

CASE	SEL230
ATTY.	edm/mjm
DUE DATE	DATE BY
CALL UP	DATE BY
RESP. SENT	DATE BY
REVIEWED BY ATTY	DATE
OK TO FILE	DATE